

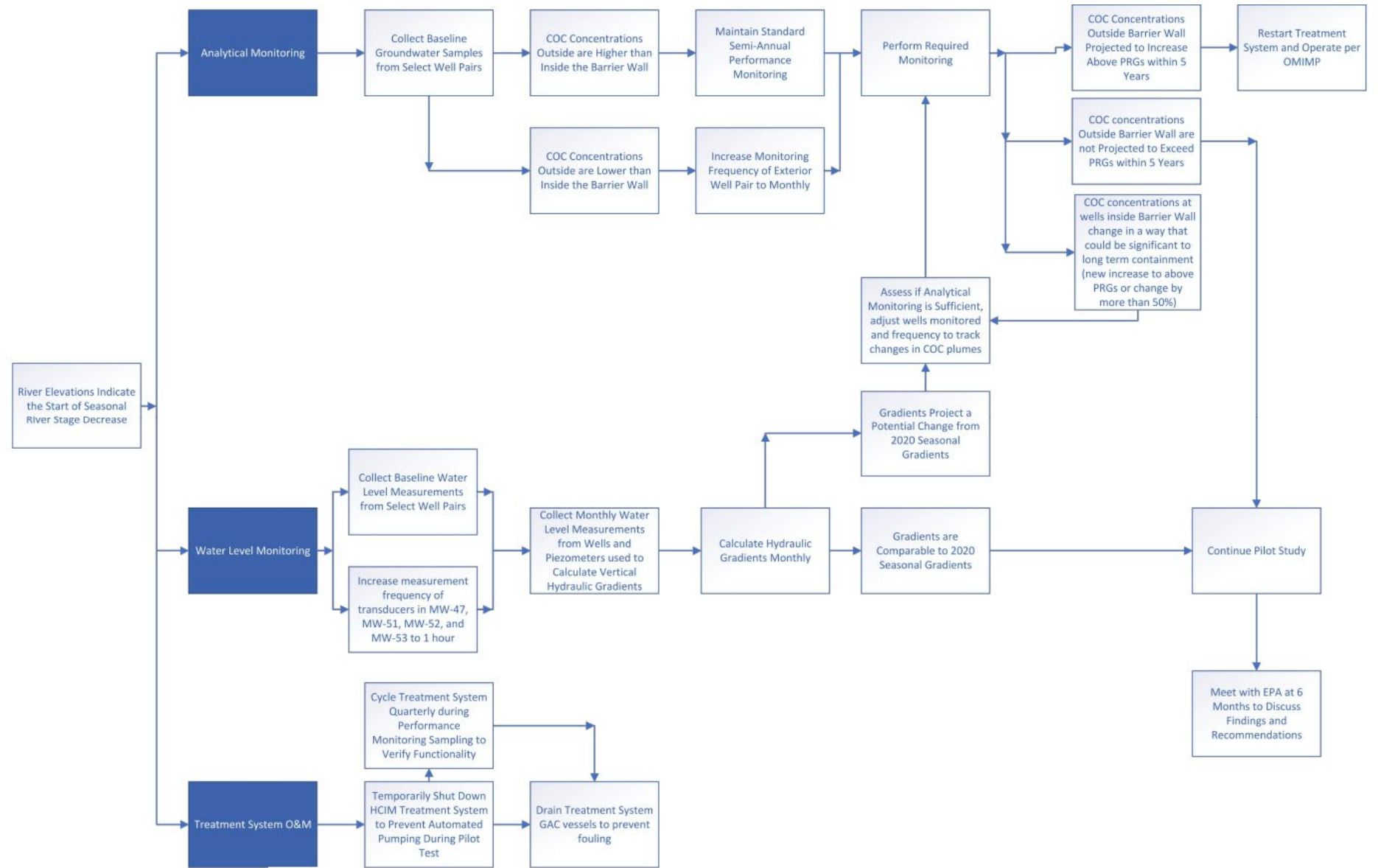
Former Rhone Poulenc Site Pre-CMS Investigation Discussion

December 17, 2021

Today's Meeting

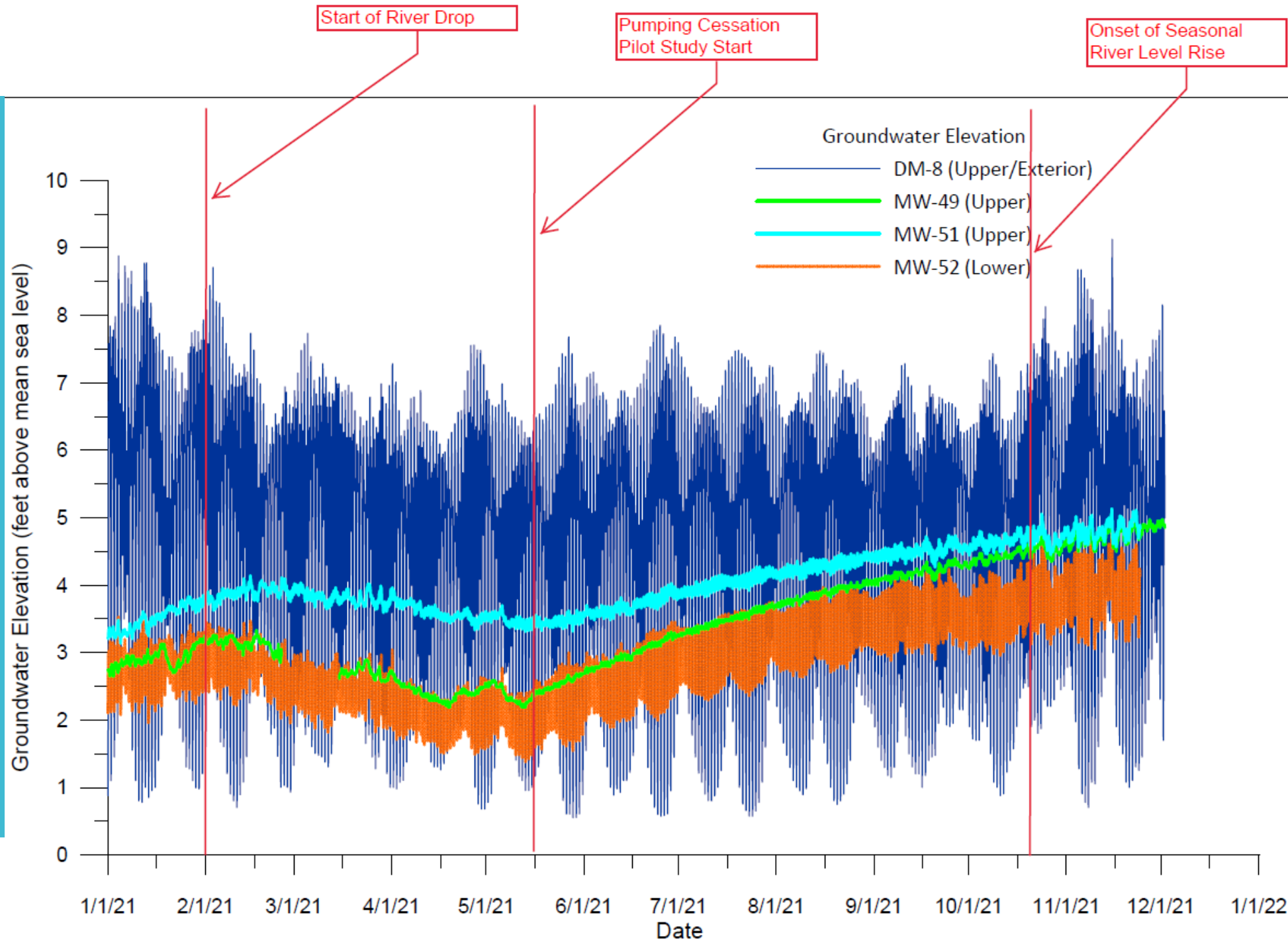
- Pilot Status
- Considerations of Fall 2021 Results
- Sampling Plan for Spring 2022 Groundwater Sampling Event
- Schedule

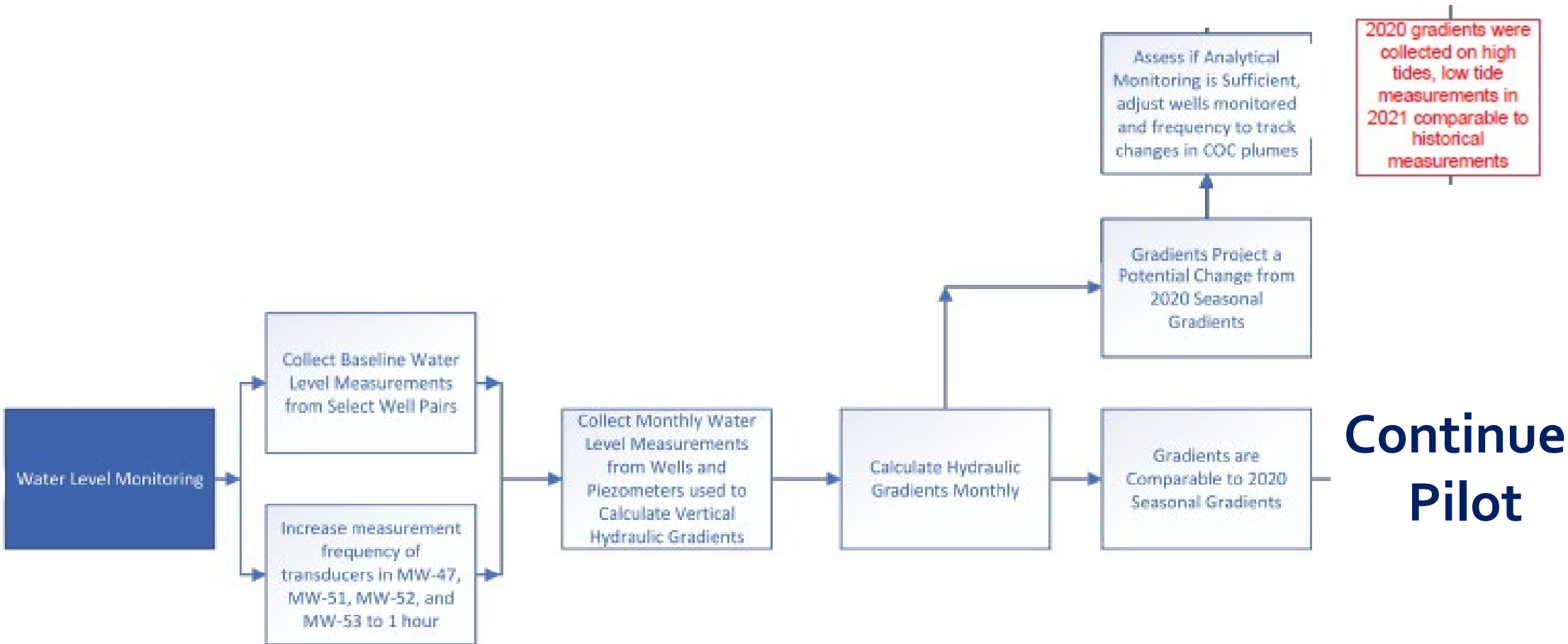
Adaptive Management Flow Chart



Water Level Monitoring

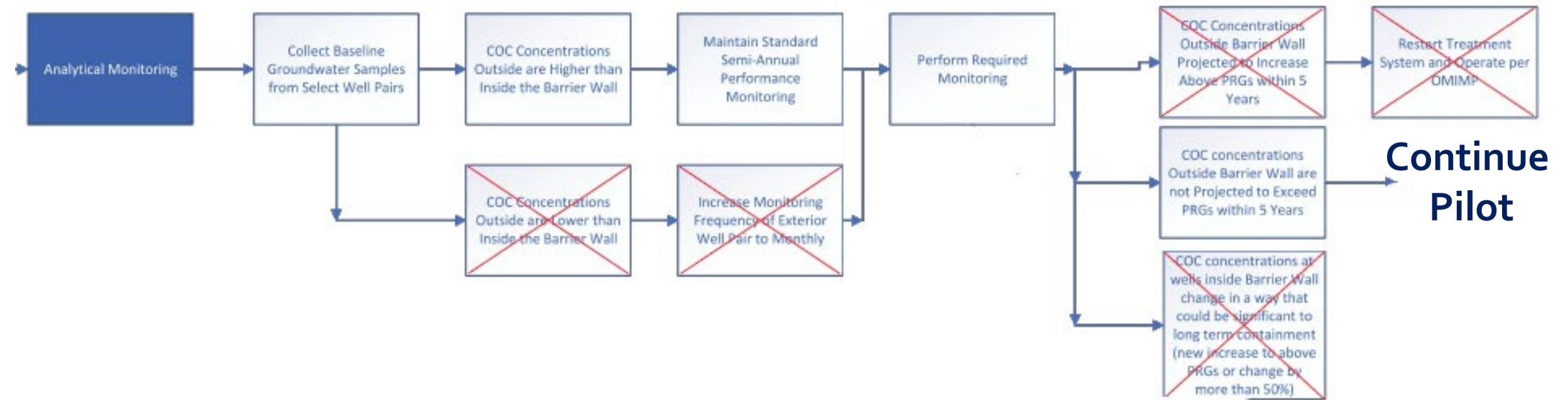
Interior levels are rising but river stage is increasing, thus expect an inward gradient maintained through early 2022. River stage is anticipated to begin dropping between Feb and Apr 2022.





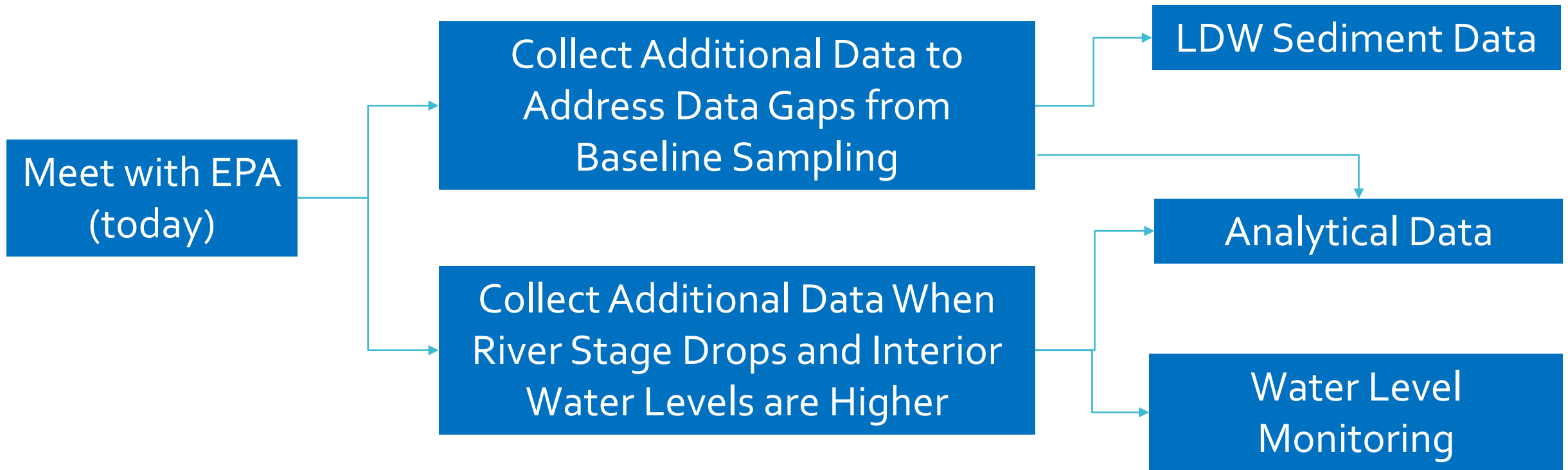
Pilot Approach- Water Level Monitoring

Hydraulic gradients consistent with historical (had to look back prior to 2020 to account for measurements on different tidal cycles)



Pilot Approach- Analytical

COC concentrations higher outside wall, maintained standard analytical monitoring



Pilot Approach- Current Stage

Address Remaining Data Gaps

LDW Sediment Data

Analytical Data

Water Level
Monitoring

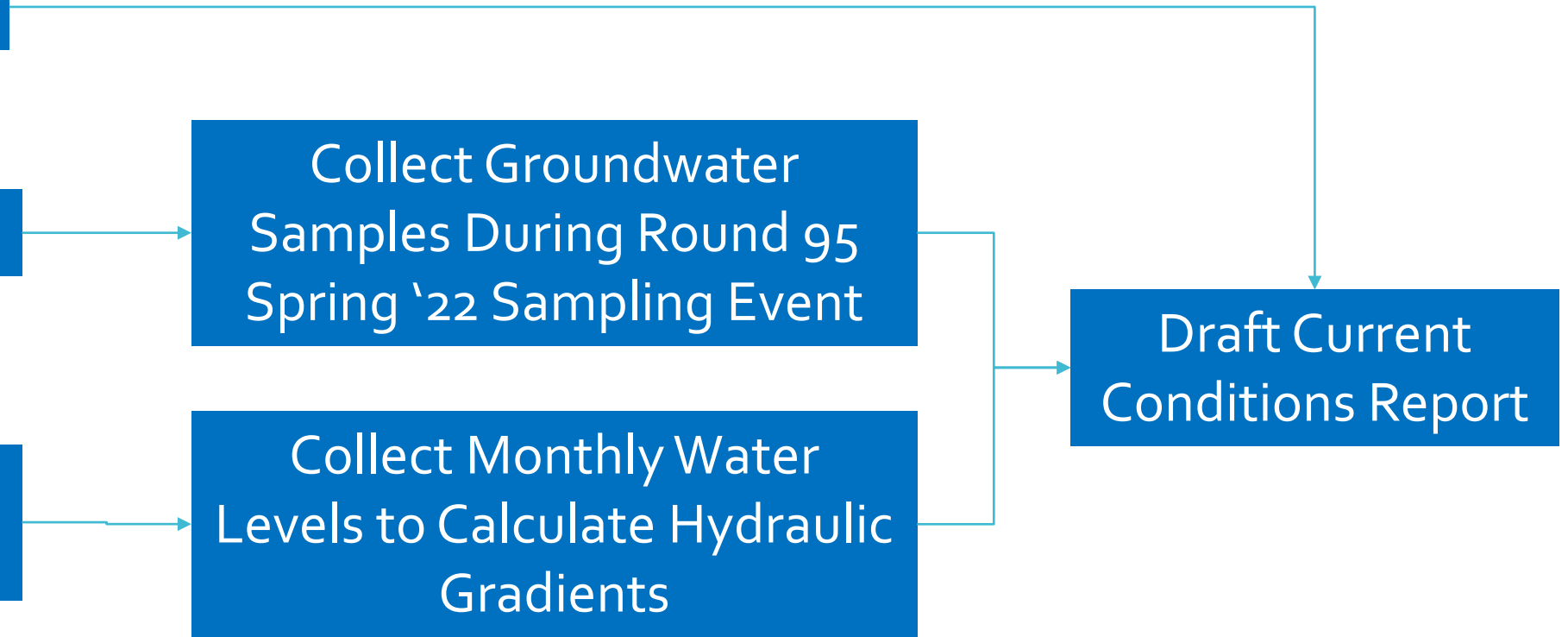
Collect Groundwater
Samples During Round 95
Spring '22 Sampling Event

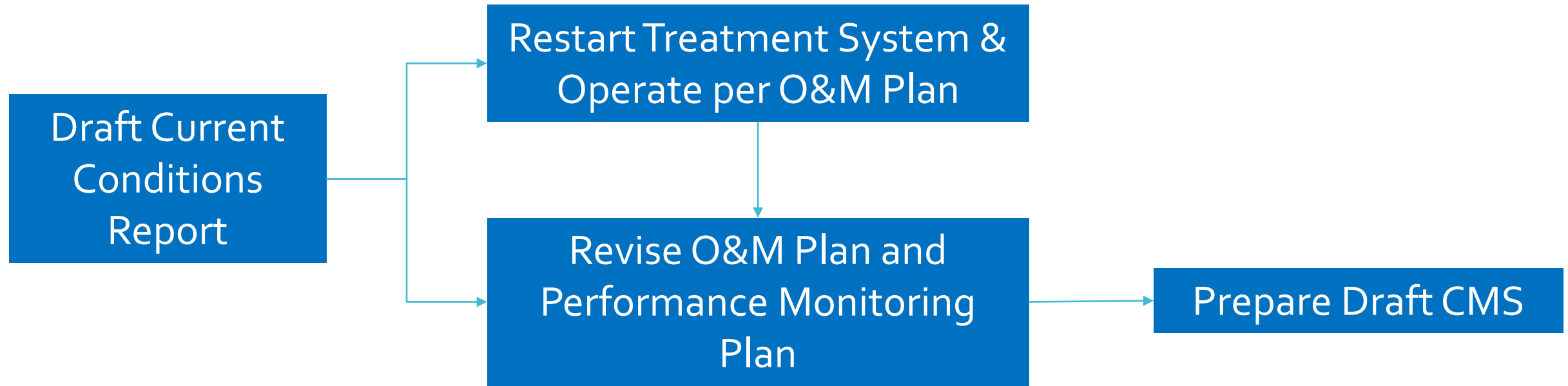
Collect Monthly Water
Levels to Calculate Hydraulic
Gradients

Draft Current
Conditions Report

Pilot Approach- Current Stage

Address Remaining Data Gaps





Pilot Approach- Next Stage

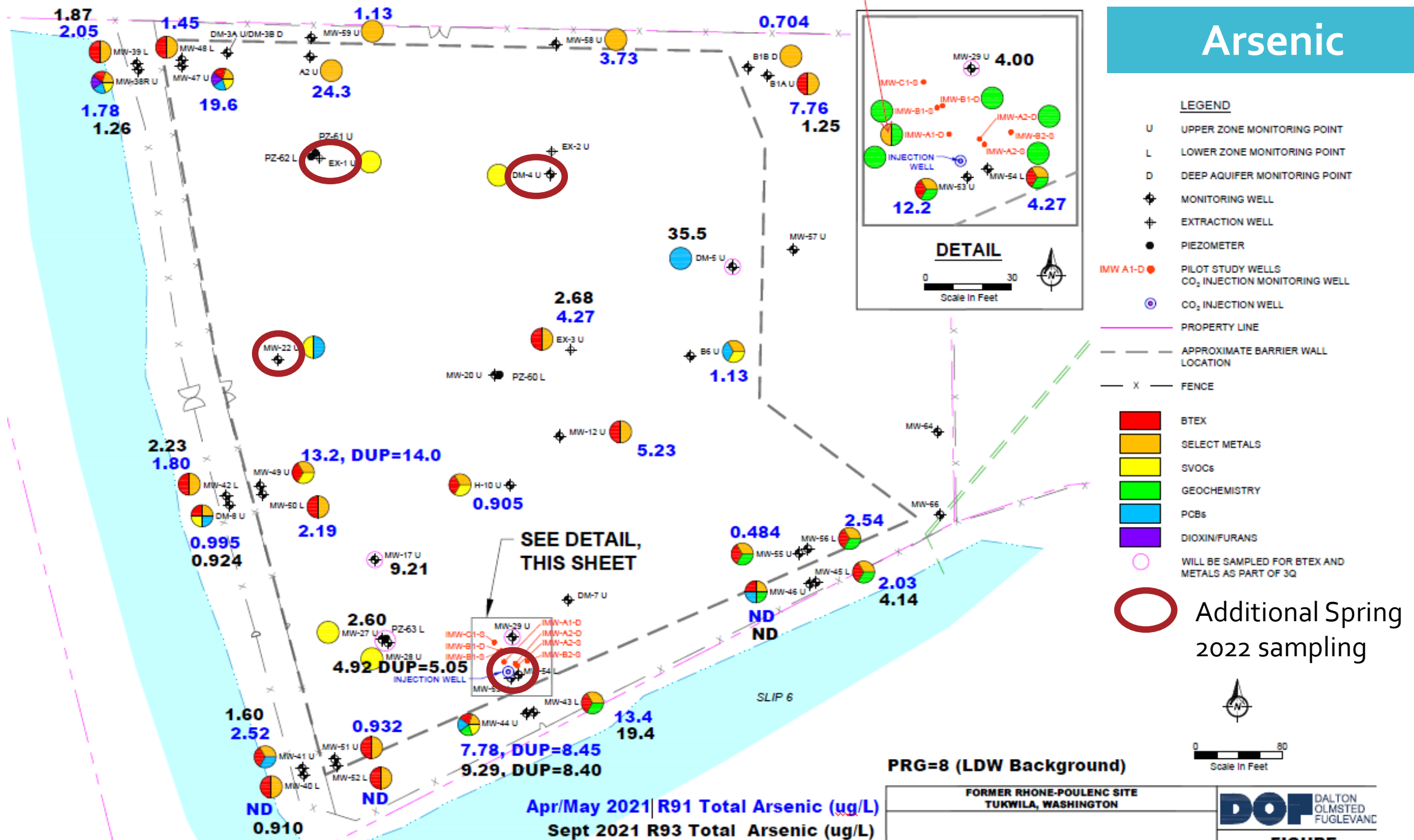
Draft CMS



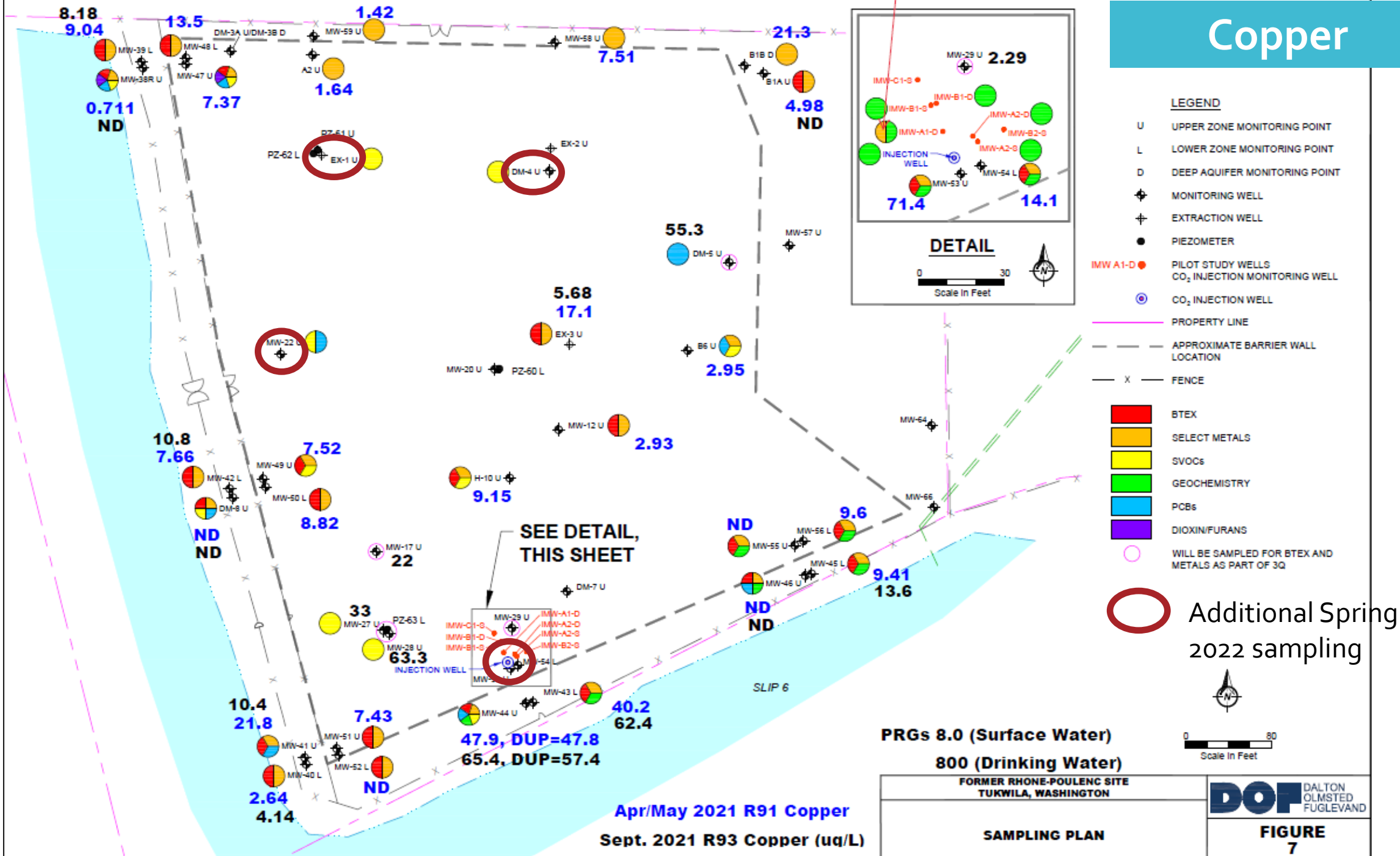
Analytical Data Gaps: Metals

- Reviewed metals from Spring and Fall 2021 sampling events in the context of revised PRGs
- Aluminum, Lead and Thallium never detected above PRGs in any samples
- All wells outside the barrier wall along the water will be sampled in Spring '22
- Consider sampling additional wells inside the barrier wall:
 - DM-4, MW-22, and EX-1 in the north
 - MW-53, MW-54, and IMW-A1-D in the south

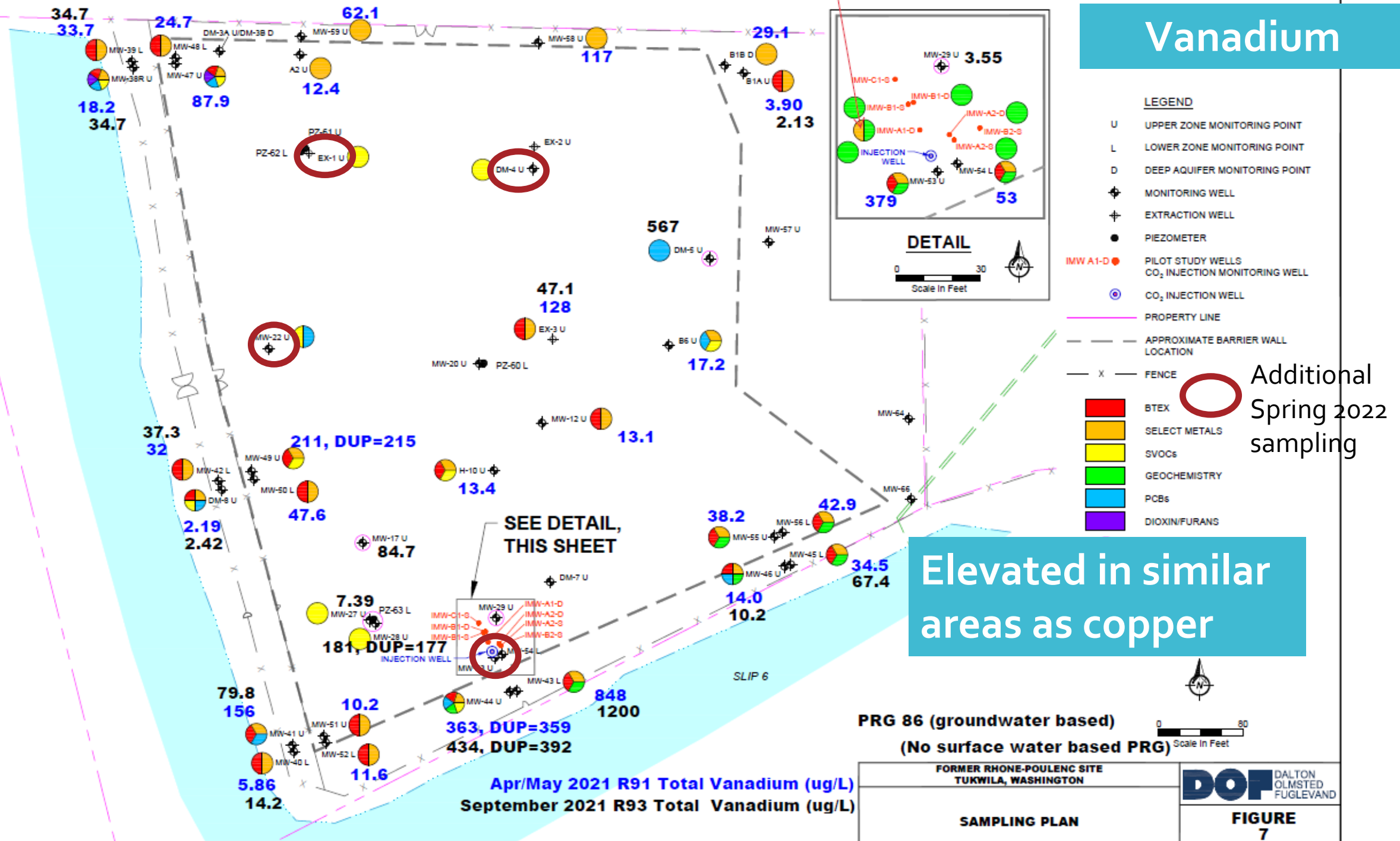
Arsenic



Copper



Vanadium





Analytical Data Gaps: BTEX

- Reviewed BTEX from Spring and Fall 2021 sampling events in the context of revised PRGs
- Fall '21 similar to Spr '21 Results
- No detections above PRGs
- All wells outside the barrier wall along the water, plus MW-17 interior, will be sampled in Spring '22



Analytical Data Gaps: SVOCs

- Reviewed SVOCs from Spring 2021 sampling events in the context of revised PRGs and EPA preliminary comments
- SVOC sampling was driven by historical PCP and naphthalene detections
- PCP was detected in the southwest corner of the site in MW-28(0.112 ug/L) and MW-44 (0.109 ug/L) above PRG but orders of magnitude lower than historical concentrations at the site.
- Consider sampling additional wells in Spring 2022:
 - Resample MW-28 and MW-44
 - Sample nearby MW-41 outside the barrier wall
- Other SVOCs were generally below PRGs with a few exceptions where detections were still quite low



Analytical Data Gaps: Geochemistry

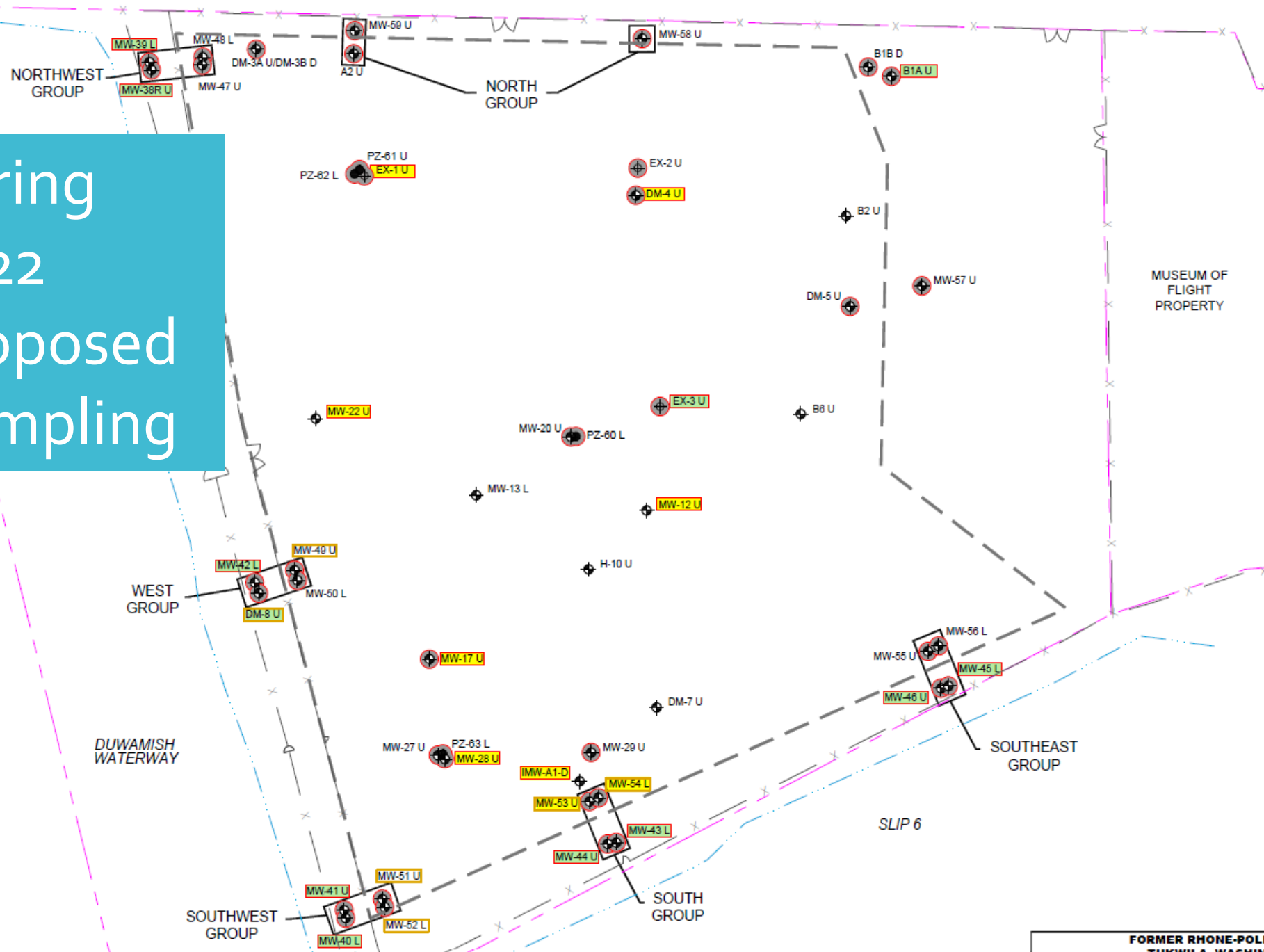
- Reviewed Spring and Fall 2021 data in the context of CMS needs and past pilot results
- Metals and geochemical parameters would be beneficial
- Consider sampling additional wells in Spring 2022:
 - Additional wells for metals as noted earlier
 - Same geochemistry parameters as for Spring 2021 round at wells in the pilot study area (and immediately adjacent outside the wall), but add in total carbon, total organic/inorganic carbon to compare current conditions (MW-43, MW-44, MW-53, MW-54, and IMW-AI-D)



Analytical Data Gaps: Other CMS Needs

- At H-10 and MW-12 sheen/odor/possible NAPL was noted in Spring 2021 but BTEX concentrations were low, analysis indicated mineral oil range organics.
- Sounded wells in August 2021 and found similar possible NAPL (0.05') at MW-12 but none detected at surrounding wells checked (H-10, DM-7, MW-20, and B6)
- Historical records from when NAPL was regularly monitored to be reviewed
- Plan to check for NAPL again in Spring 2022 (when water levels are expected to increase)
- Plan to analyze NAPL from MW-12 if there is sufficient volume to sample for SVOC and PCB analysis.

Spring 2022 Proposed Sampling



LEGEND

- U UPPER ZONE MONITORING POINT
- L LOWER ZONE MONITORING POINT
- D DEEP AQUIFER MONITORING POINT
- ⊕ MONITORING WELL
- ⊕ EXTRACTION WELL
- PIEZOMETER
- PERFORMANCE MONITORING WELL, WATER LEVELS MEASURED QUARTERLY
- PROPERTY LINE
- - - APPROXIMATE BARRIER WALL LOCATION
- X - FENCE
- WELLS EQUIPPED WITH AUTOMATED TRANSDUCER / LOGGERS
- WELLS SAMPLED SEMIANNUALLY
- ADDITIONAL SAMPLING LOCATIONS TO ADDRESS DATA GAPS

NOTE:

1. DM-8 and MW-49 water levels are automatically logged as part of HCM pretreatment system.



0 80
Scale in Feet

Schedule

- Submit Round 93 Report (Fall 2021 Event)~ Dec '21
- December Monthly Progress Report with maps and proposed sampling – Jan '22
- Continue Monthly Monitoring & Reporting evaluating for river stage change
- Round 95 Sampling plus data gaps sampling – March '22 unless river stage indicates April preferred
- Continue informal calls to communicate activity & results in real time

Reporting Plan

- Current Conditions Report
 - Include results from the Round 95 (Spring '22) sampling event – allow for assessing changes from treatment system being off
 - Submit on schedule for Round 95 – 30 days after validated data received (i.e. prior to year end, likely May-Jun '22)
- CMS
 - Summer or fall 2022

END